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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,988	12/14/2000	Nk Srinivas	50037.10US01/163942.1	8473

  

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EXAMINER	
BAROT, BHARAT	

ART UNIT	PAPER NUMBER
2155	

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 09/736,988	Applicant(s) SRINIVAS ET AL.	
	Examiner Bharat N. Barot	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**RESPONSE TO AMENDMENT**

1. Claims 1-20 remain for further examination. Applicants' arguments with respect to claims 1, 7, and 11 filed on March 19, 2007 have been fully considered.

**The old rejection maintained**

2. The rejection is respectfully maintained as set forth in the last Office Action mailed on December 18, 2006. Applicants' arguments with respect to claims 1, 7, and 11 have been fully considered but they are deemed to be moot and old rejection maintained.

**Claim Rejections - 35 USC § 103(a)**

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klassen et al (U.S. Patent No. 6,711,137) in view of Dillon et al (U.S. Patent No. 6,473,793).

5. As to claim 1, Klassen et al teach a computer-implemented method for tuning a size of a TCP receive window on a receiving computing device (see abstract; figure 1; column 7 lines 49-55; and column 8 lines 33-37) comprising: determining a bandwidth of a network connection (figure 1; and column 7 line 66 to column 8 line 2); and tuning the size of the TCP receive window based on the determined bandwidth (figure 1; column 8 lines 7-19; column 13 lines 21-44; and column 19 lines 11-48).

However, Klassen et al do not explicitly teach that automatically tuning the size of the TCP receive window comprises setting the size of the current TCP receive window without manual intervention and setting the size of the current TCP receive window sets the number of packets allowed to be sent from a sending computer device to the receiving computing device before an acknowledgment is sent from the receiving computing device to the sending computing device.

Dillon et al explicitly teach that automatically tuning the size of the TCP receive window on the receiving computing device (hybrid gateway receives the packet and adjusting the window size based on the user bandwidth) based on the determined bandwidth, wherein automatically tuning the size of the TCP receive window comprises setting the size of the current TCP receive window without manual intervention and setting the size of the current TCP receive window sets the number of packets allowed to be sent from a sending computer device to the receiving computing device before an acknowledgment is sent from the receiving computing device to the sending computing device (figures 1 and 14; column 9 lines 39-67; column 10 lines 12-43; column 11 lines

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23-35; column 12 lines 4-30; column 16 lines 8-36; column 18 lines 39-50; column 19 line 5 to column 20 line 40; column 21 lines 26-32; and column 22 lines 1-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Dillon et al as stated above with the method and system of Klassen et al for automatically tuning a size of a TCP receive window because it would have minimized the system bottleneck and provided efficient way of managing the transmission of information in the network.

6. As to claim 2, Klassen et al teach the steps of: obtaining at least one attribute of a network connection device; and determining the bandwidth of the network connection from the at least one obtained attribute (column 9 lines 47-59; and column 11 lines 22-64).

7. As to claim 3, Klassen et al teach the steps of: determining the size of the TCP receive window based on the determined bandwidth; and setting the size of the TCP receive window to the determined size bandwidth (column 3 lines 39-49; column 13 lines 21-44; and column 19 lines 11-48).

Dillon et al explicitly teach that determining the size of the TCP receive window based on the determined bandwidth; and setting the size of the TCP receive window to the determined size bandwidth (column 9 lines 39-67; column 21 lines 26-32; and column 22 lines 1-3).

8. As to claim 4, Klassen et al teach a step of: accessing the size of the TCP receive window from a look-up table (database/storage) (column 6 lines 29-40; and column 8 line 60 to column 9 line 10).

However, Klassen et al do not explicitly teach that the look-up table includes at least three different sizes from which the size of the TCP receive window is selected.

Dillon et al explicitly teach that the look-up table includes at least three different sizes from which the size of the TCP receive window is selected (column 16 lines 7-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Dillon et al as stated above with the method and system of Klassen et al for automatically tuning a size of a TCP receive window because it would have provided more selection for the window size; therefore, the system tuned the best size of the TCP receive window.

9. As to claim 5, Klassen et al teach a step of: determining a speed of the network connection device or a name of the network connection device (column 7 lines 56-65; and column 8 line 60 to column 9 line 10).

Dillon et al explicitly teach that determining a speed of the network connection device or a name of the network connection device (column 10 lines 20-44).

10. As to claim 6, Klassen et al teach the steps of: monitoring the network connection to determine if the network connection has changed: and tuning the size of the TCP receive window if the network connection has changed (column 8 line 60 to column 9 line 10; column 13 lines 21-44; and column 15 lines 23-36).

11. As to claims 7-10, they are also rejected for the same reasons set forth to rejecting claims 1-4 and 6 above, since claims 7-10 are merely a computer readable medium having instructions for controlling the method of operations defined in the claims 1-4 and 6.

12. As to claims 11-14, they are also rejected for the same reasons set forth to rejecting claims 1-2 and 5-6 above, since claim 11-14 are merely an apparatus to performing the method of operations defined in the claims 1-2 and 5-6.

13. As to claims 15 and 19, claim 15 is rejected for the same reasons set forth to rejecting claims 3-4 above and claim 19 is merely an apparatus to performing the method of operations defined in the claim 15.

14. As to claim 17, Klassen et al disclose that the at least one attribute is a name of a network connection device (column 9 lines 22-23).

15. As to claim 18, Klassen et al teach that sizing the TCP receive window based on a type of a network connection device (figures 3-4; and column 9 line 32 to column 10 line 16).

16. Claims 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klassen et al (U.S. Patent No. 6,711,137) in view of Dillon et al (U.S. Patent No. 6,473,793) as applied to claims 1 and 11 above, and further in view of Toporek et al (U.S. Patent No. 6,654,344).

17. As to claim 16, neither Klassen nor Dillon explicitly teaches that determining a version of the operating environment executing on the processor / current operating system and setting the size of the TCP receive window based on the operating environment / operating system. Toporek et al explicitly teach that determining a version of the operating environment executing on the processor / current operating system and setting the size of the TCP receive window based on the determined bandwidth and the operating environment / operating system (column 5 lines 21-40; column 6 lines 48-60; column 10 lines 32-46; and column 18 lines 7-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Toporek et al as stated above with the method and system of Klassen et al for automatically tuning a size of a TCP receive window because it would have minimized the system bottleneck and provided efficient way of managing the transmission of information in the network.



18. As to claim 20, claim 20 is rejected for the same reasons set forth to rejecting claim 16 above, since claim 20 is merely an apparatus to performing the method of operations defined in the claim 16.

### **Response to Arguments**

19. Applicant's arguments have been fully considered. The examiner has attempted to answer (response) to the remarks (arguments) in the body of the Office action.

Applicant's arguments with respect to claims 1-20 filed on March 19, 2007 have been fully considered but they are not deemed to be persuasive for the claims 1-20.

20. In the remarks, the applicant argues that:

(A) **Argument:** Dillon does not actually adjust the size of the TCP receive window.

**Response:** Dillon et al explicitly teach that a hybrid gateway receives the TCP packet and the advertised window size of the TCP packet is modified, if necessary, to throttle the user's bandwidth (figures 1 and 14; column 9 lines 39-67; column 16 lines 8-36; and column 22 lines 1-3), which implies that adjusting the size of the TCP receive window on a computing device based on the determined bandwidth.

Combination of Klassen et al and Dillon et al explicitly teaches that a computer-implemented method for automatically tuning a size of a TCP receive window on a computing device (ANSA of Klassen et al and HG of Dillon et al explicitly functions that automatically tuning a size of a TCP receive window, see rejection of claim 1).

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21. This action is made final. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

**Contact Information**

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bharat Barot** whose Telephone Number is **(571) 272-3979**. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number **(571) 273-8300**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Saleh Najjar**, can be reached at **(571) 272-4006**.

Patent Examiner Bharat Barot

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May 17, 2007

*Bharat Barot*  
**BHARAT BAROT**  
**PRIMARY EXAMINER**